In re: Calenda et al.

Inter'l Appl. No.: PCT/FR2004/003336

Page 3 of 6

Amendments to the Claims:

- 1. (Original) An antibody or a functional fragment of an antibody comprising at least the variable domains of the heavy and light chains, characterized in that it binds specifically to the uracil-DNA-glycosylase inhibitor (Ugi) of the sequence SWISSPROT P14739 and in that it inhibits the binding between uracil-DNA-glycosylase (UDG) and its inhibitor, Ugi.
- 2. (Original) The antibody or antibody fragment as claimed in claim 1, characterized in that it is chosen from monoclonal antibodies, polyclonal antibodies and the Fab, Fv and scFv fragments.
- 3. (Original) The antibody as claimed in claim 2, characterized in that it is a polyclonal antibody obtained by immunizing an animal with a preparation of recombinant uracil-DNA-glycosylase inhibitor.
- 4. (Currently Amended) The use of an antibody or an antibody fragment as claimed in any one of claims 1 to 3 claim 1, as antagonist of the binding between uracil-DNA-glycosylase and its inhibitor.
- 5. (Original) The use as claimed in claim 4, for decontaminating nucleic acid amplification reactions, in particular polymerase chain reactions.
- 6. (Currently Amended) A method for amplifying decontaminated nucleic acids, characterized in that it comprises the following steps:
- a) incubation of a reaction mixture containing: a nucleic acid sample to be amplified, the reagents necessary for its amplification including deoxyuridine triphosphate nucleotides, uracil-DNA-glycosylase, uracil-DNA-glycosylase inhibitor, and an anti-uracil-DNA-glycosylase inhibitor antibody or antibody fragment as claimed in claim 1 any one of claims 1 to 3, at a temperature of between 25°C and 60°C, preferably at

In re: Calenda et al.

Inter'l Appl. No.: PCT/FR2004/003336

Page 4 of 6

37°C, for a sufficient time to allow the deglycosylation of the nucleic acids containing deoxyuridine, and

- b) incubation of said mixture at a temperature of between 60°C and 98°C, preferably between 90°C and 98°C, for a sufficient time to allow the denaturation of the anti-uracil-DNA-glycosylase inhibitor antibody and the release of Ugi, and
 - c) amplification of the DNA under appropriate conditions.
- 7. (Currently Amended) The method as claimed in claim 6, characterized in that the incubation in steps a) and b) is carried out for less than one hour, preferably for 30 s to 30 min, preferably for 5 min to 10 min.
- 8. (Original) The method as claimed in claim 6, characterized in that the anti-uracil-DNA-glycosylase inhibitor antibody and the uracil-DNA-glycosylase inhibitor form a reversible complex.
- 9. (Currently Amended) A kit for decontaminating nucleic acid amplification reactions, characterized in that it comprises at least one antibody or an antibody fragment as claimed in claim 1 or claim 2, preferably in the form of a reversible complex with the uracil-DNA-glycosylase inhibitor.